# Chi Zhang

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> Year of birth: 1992 Sex: Female Nationality: Norwegian

## **Work Experience**

## **Statistician in Real World Data / R developer — University of Oslo** 2023.04 - present, Oslo, Norway

- Lead the research collaboration on drug prescription and uses using complex longitudinal Electronic Health Records with clinicians at Oslo University Hospital. Develop and maintain R package ggehr, a ggplot2 extension for visualization of mixed type EHR.
- Analyse and assist statistical works on 3 projects at the Department of Nutrition, including Noreden,
  Norkost using Norwegian dietary questionnaire data. Develop R package noreden for sustainable diet discovery with quadratic optimization.
- Co-lead cross-industry collaborative working group: <u>CAMIS</u>: comparing statistical methods in R and SAS for pharmaceutical industry. Co-lead (until 2024.6) of PHUSE RWD Analysis Guideline for Statistical Programmers working group

## **Lecturer in biostatistics and R programming — University of Oslo** 2023.01 - present, Oslo, Norway (part-time)

- Lead the transition of statistics course towards over 150 students at the medical faculty using R and quarto, which was positively received by both instructors and students. Develop <u>course website</u>.
- Instruct 3 biostatistics courses and the Carpentries workshop

# **Data scientist — Norwegian Institute of Public Health / Folkehelseinstituttet** 2020.10 - 2023.02, Oslo, Norway

- Develop, maintain and improve Sykdomspulsen, the open source infrastructure for real time public health surveillance on infectious disease and mortality in Norway. Sykdomspulsen has been the core of emergency preparedness and response during the COVID-19 pandemic.
- Develop and automate data I/O, cleaning, analysis and reporting tasks from 15 national health registries every day, generating 1000+ daily situational reports for the health authorities for decision making
- Develop the R shiny website for 500+ municipal public health officers for real-time situational awareness
- Develop and maintain R packages to facilitate standardized visualisation, computing and reporting
- Responsible statistician for the Norwegian Mortality Monitoring (<u>NorMOMO</u>), part of the European network <u>EuroMOMO</u> as well as other public registries such as the Cause of Death Registry

# Statistical advisor — Oslo Center for Biostatistics and Epidemiology, Oslo University Hospital 2016.08 - 2019.09 and 2021.09 - present (part time), Oslo, Norway

- Provide statistical assistance on methodology and result interpretation to medical researchers and clinicians in 10+ projects, supervise statistical work by medical students. Edit, draft and comment on papers

## **Education**

### Ph.D., Biostatistics — University of Oslo

2022, Oslo, Norway

Thesis: Representation and utilisation of hospital Electronic Health Records data

### MSc, Statistics — Imperial College London

2016, London, UK

Thesis: Finding Patterns in the Thickness of Geological Sediment layers

### BSc, Mathematics with Finance — University of Liverpool

2014, Liverpool, UK

1st Class

Dual degree with BSc Financial Mathematics at Xi'an Jiaotong Liverpool University

### **Software**

For an updated list of softwares, please see my website (<u>link</u>)

### **Skills**

#### **Programming:**

- Scientific computing: R, Python, Matlab. Experience with R package development
- Unix/Linux, bash scripting
- Version control and DevOps: Git, Jenkins, Airflow
- Database: SQL
- Web: Quarto, R shiny

#### Statistics and data skills

- Analysis of complex EHR data
- Observational data
- Regression analysis
- Longitudinal data and time series

#### Languages

English (professional proficiency), Chinese (native), Norwegian (intermediate), Italian (basic)